CS4740 Spring 2021 Cloud Computing PA#3

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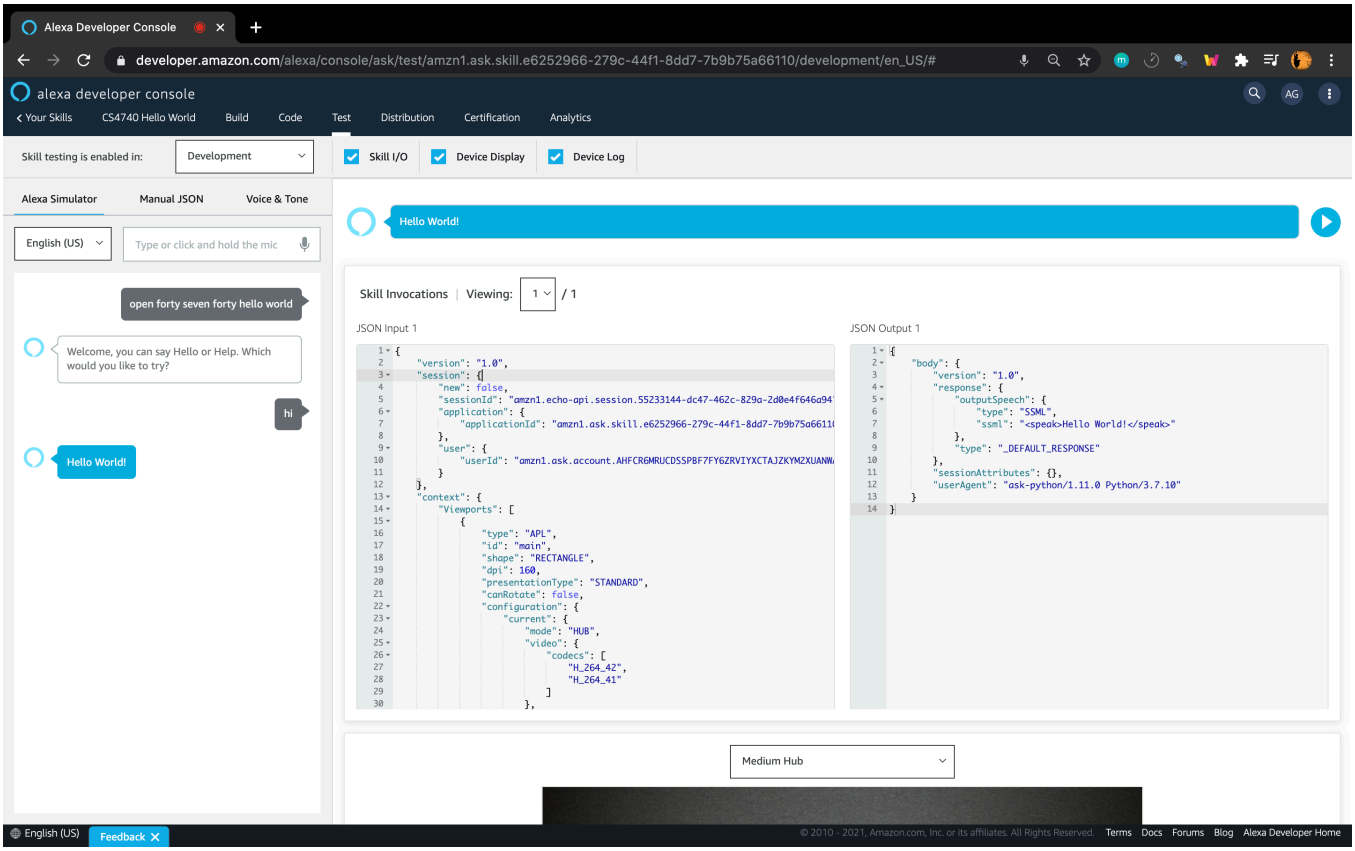
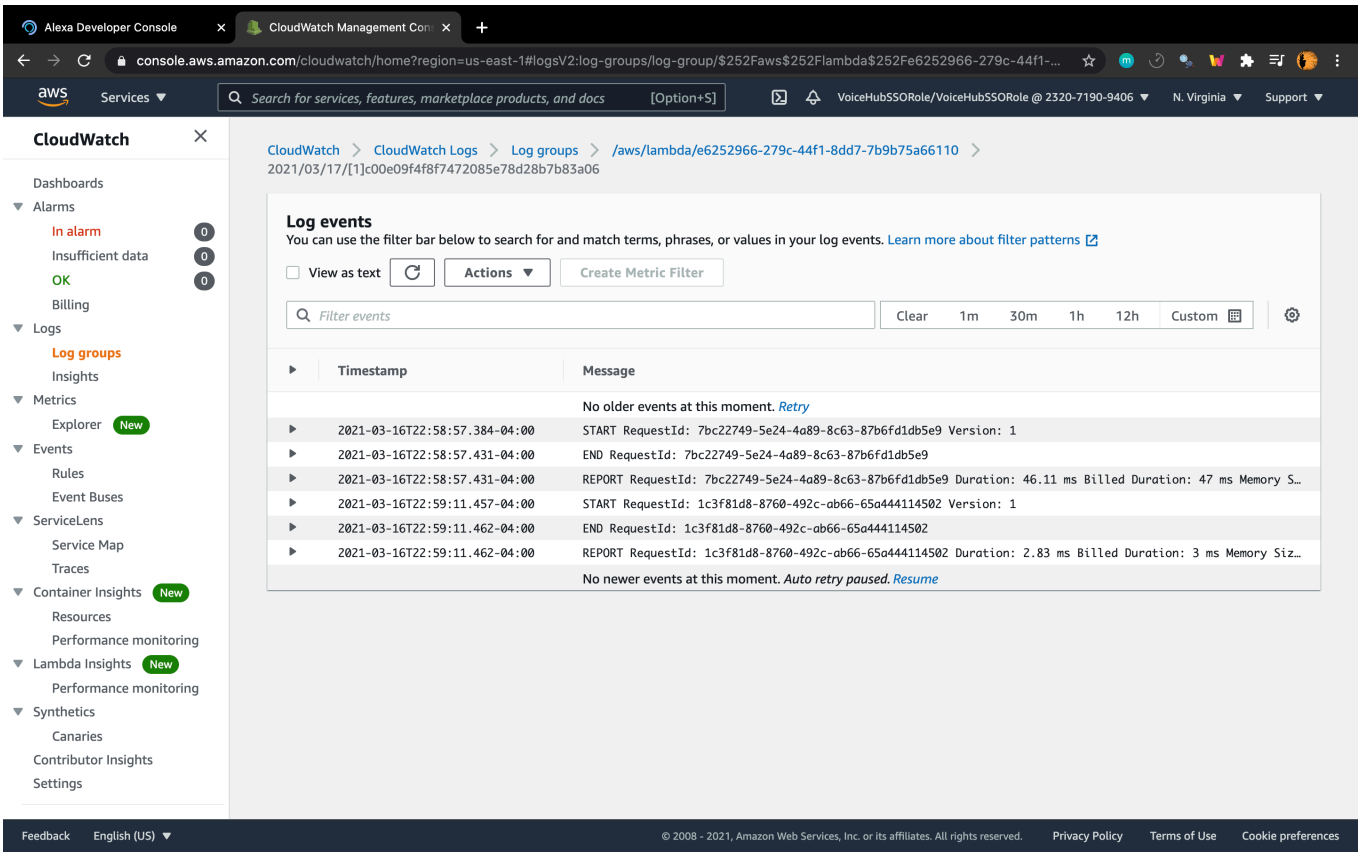
Instructions: Fill in your answers to the 5 questions and SUBMIT A PDF to collab (along with the source code requested in Question 1 and your source code requested in Question 5)

1. [20 points] After completing Part 1 ("Simulating the thermostat"), cut-and-paste a screenshot of a browser screen (full width of page) to http://[hostname]/ThermsAreUs/api/v1.0/current-temp To receive full credit, the URL must be legible in the screenshot. If you were unable to complete this part, explain how far you were able to get and describe the problem (you were unable to debug). ALSO attach the source code for your thermostat simulator to your collab submission (if multiple files, then ZIP format).

2. [20 points] After completing Part 2 (“Getting familiar with Alexa”), cut-and-paste two browser screens: [1] (full width of page) when you go to the “Test” tab and engage your service. To receive full credit, both the “JSON Input” and “JSON Output” must be shown, and your name (initials) must be shown in the upper right of the image (as displayed in the Alexa Developer Console). [2] The CloudWatch logs when you go to the “Code” tab, click on the CloudWatch link (under “Code”), *and then click on the most recent log* (thereby showing events such as “START”, “END”, and “REPORT”). If you were unable to complete this part, explain how far you were able to get and describe the problem (you were unable to debug).




Alexa Developer Console
CloudWatch Management Con
console.aws.amazon.com/cloudwatch/home?region=us-east-1#logsV2:log-groups/log-group/$252Faws$252Flambda$252Fe6252966-279c-44f1-...
aws
Services
Search for services, features, marketplace products, and docs
[Option+S]
VoiceHubSSORole/VoiceHubSSORole @ 2320-7190-9406
N. Virginia
Support
CloudWatch
Dashboards
Alarms
In alarm 0
Insufficient data 0
OK 0
Billing
Logs
Log groups
Insights
Metrics
Explorer New
Events
Rules
Event Buses
ServiceLens
Service Map
Traces
Container Insights New
Resources
Performance monitoring
Lambda Insights New
Performance monitoring
Synthetics
Canaries
Contributor Insights
Settings
CloudWatch > CloudWatch Logs > Log groups > /aws/lambda/e6252966-279c-44f1-8dd7-7b9b75a66110 >
2021/03/17/[1]c00e09f4f8f7472085e78d28b7b83a06
Log events
You can use the filter bar below to search for and match terms, phrases, or values in your log events. Learn more about filter patterns
View as text
Actions
Create Metric Filter
Filter events
Clear
1m
30m
1h
12h
Custom
Timestamp
Message
No older events at this moment. Retry
2021-03-16T22:58:57.384-04:00 START RequestId: 7bc22749-5e24-4a89-8c63-87b6fd1db5e9 Version: 1
2021-03-16T22:58:57.431-04:00 END RequestId: 7bc22749-5e24-4a89-8c63-87b6fd1db5e9
2021-03-16T22:58:57.431-04:00 REPORT RequestId: 7bc22749-5e24-4a89-8c63-87b6fd1db5e9 Duration: 46.11 ms Billed Duration: 47 ms Memory S…
2021-03-16T22:59:11.457-04:00 START RequestId: 1c3f81d8-8760-492c-ab66-65a444114502 Version: 1
2021-03-16T22:59:11.462-04:00 END RequestId: 1c3f81d8-8760-492c-ab66-65a444114502
2021-03-16T22:59:11.462-04:00 REPORT RequestId: 1c3f81d8-8760-492c-ab66-65a444114502 Duration: 2.83 ms Billed Duration: 3 ms Memory Siz…
No newer events at this moment. Auto retry paused. Resume
Feedback
English (US)
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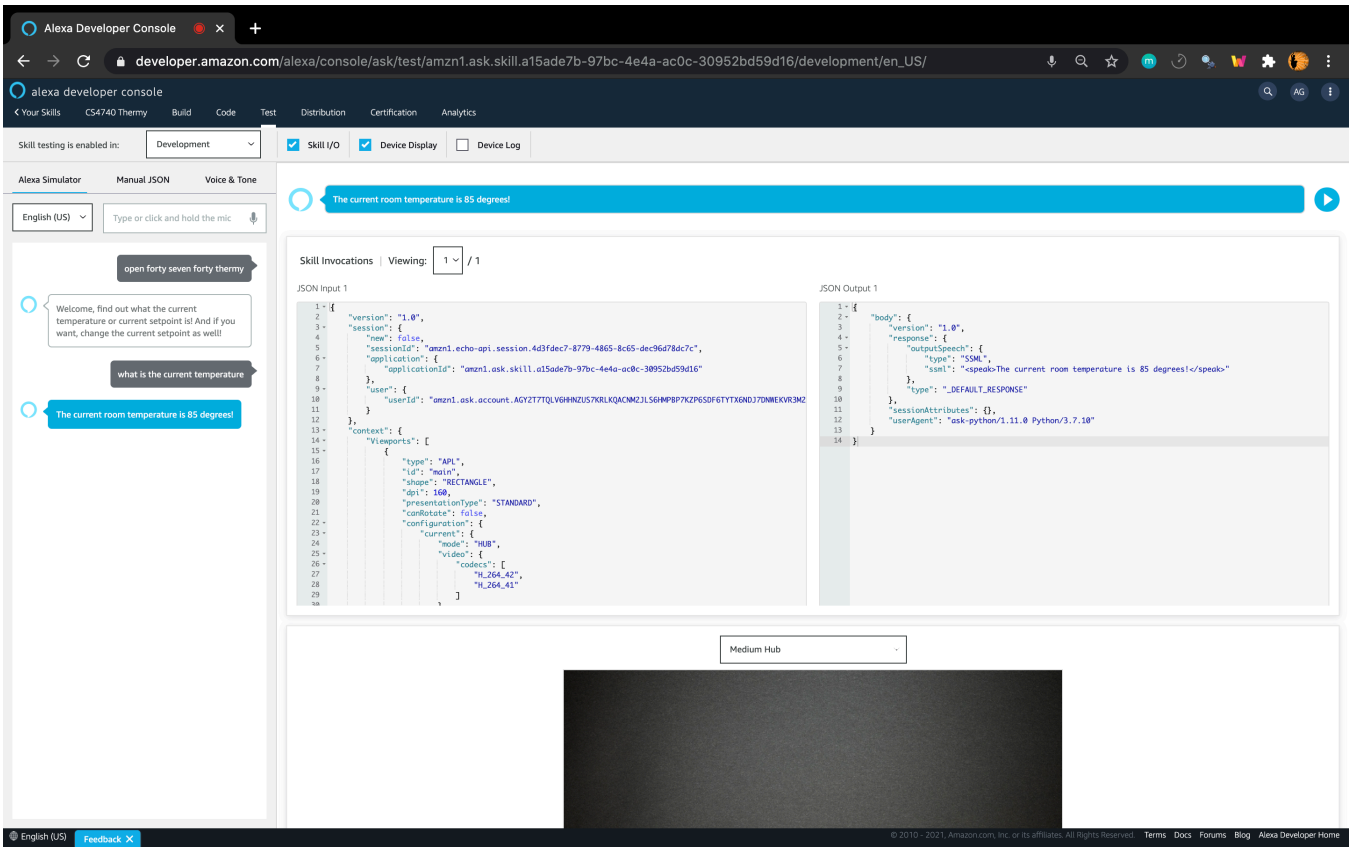
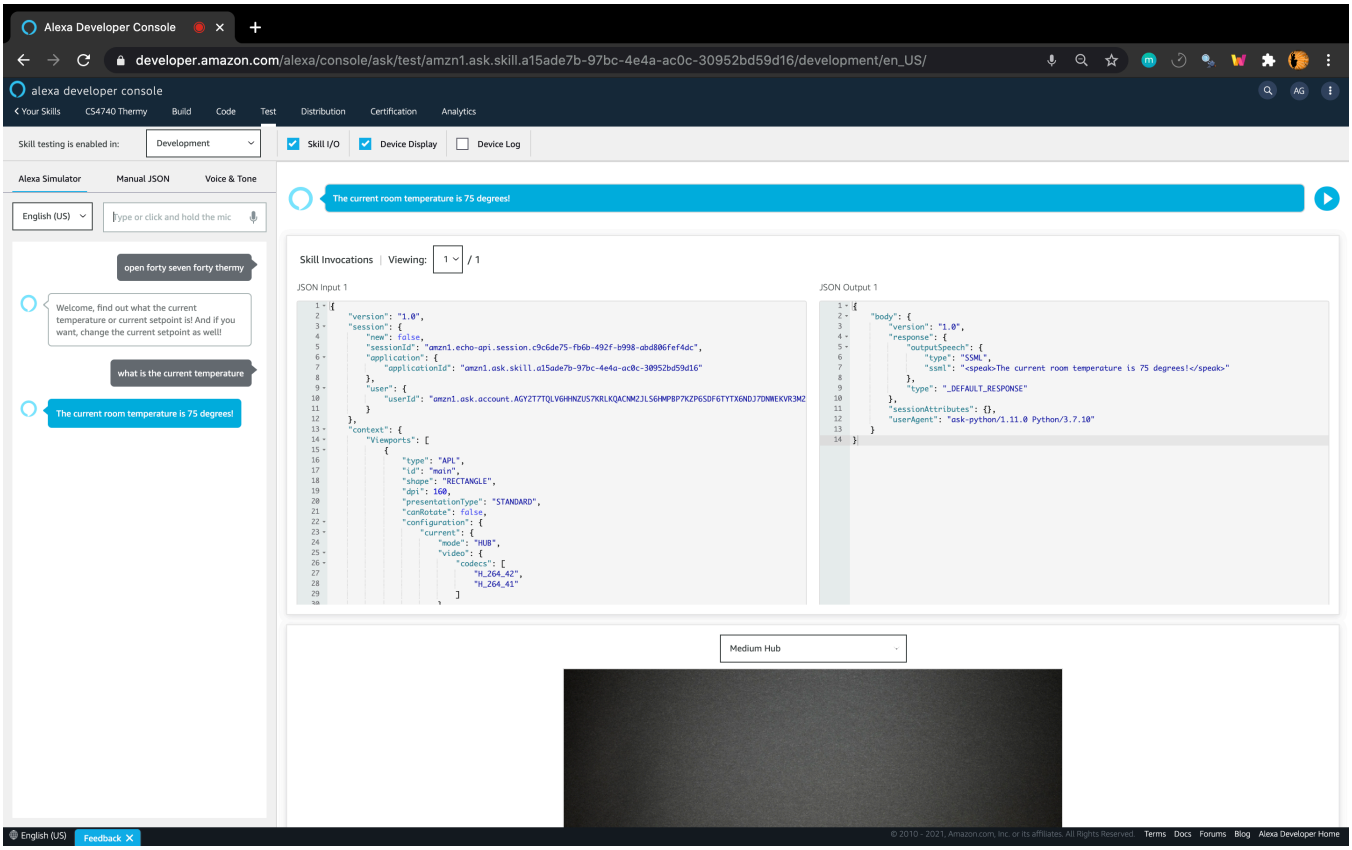
Privacy Policy
Terms of Use
Cookie preferences

3. [20 points] After completing Part 3 (“Using voice to control your thermostat”) cut-and-paste your alexa developer console browser screen (full width of page) when you go to the “TEST” page, open our service, and ask for the current room temperature To get full credit, both the “JSON Input” and “JSON Output” must be shown (for our service, of course). If you were unable to complete this part, explain how far you were able to get and describe the problem (you were unable to debug).

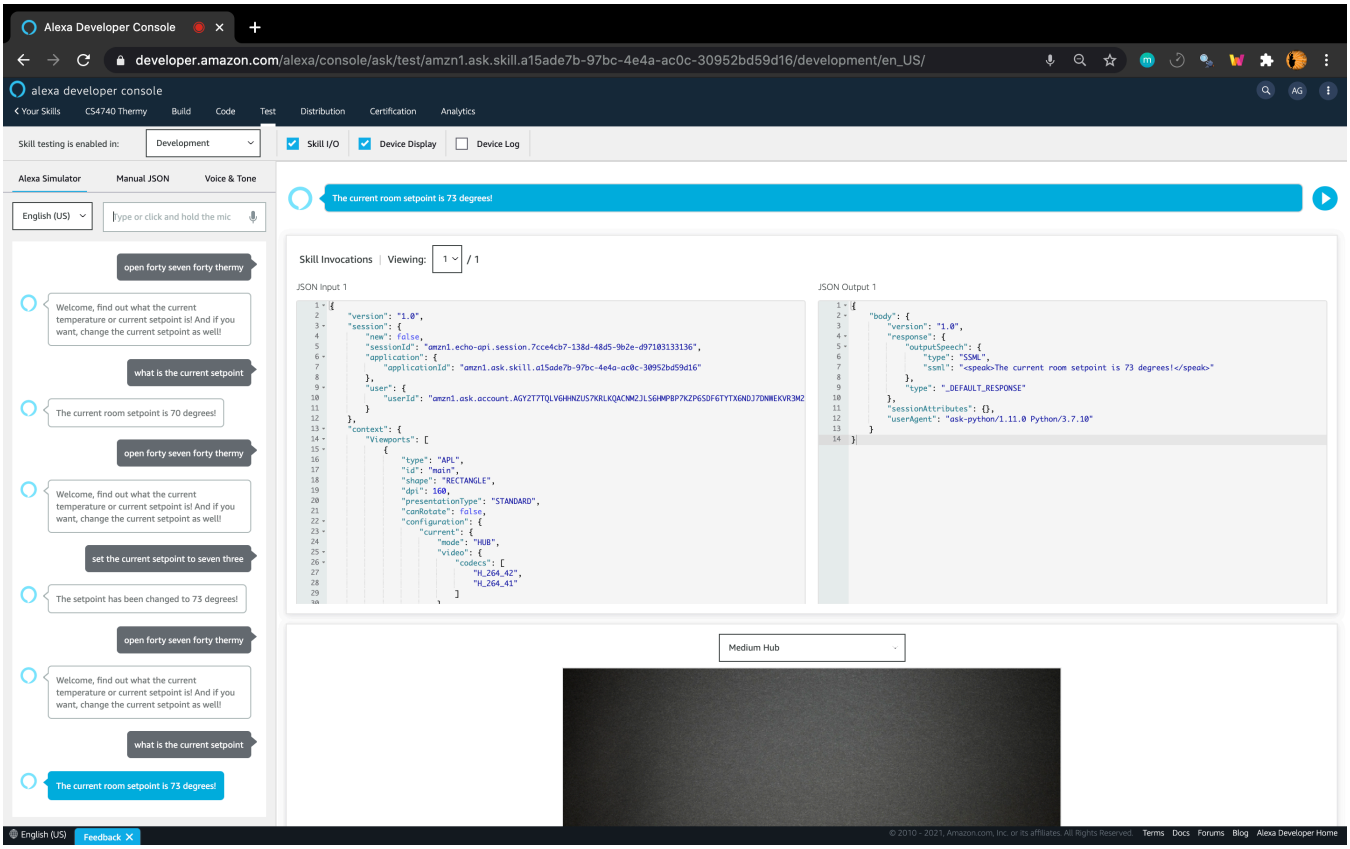
Hard-Coded:



Using REST API:



4. [20 points] Repeat Question 3, except [1] ask what the current setpoint is, [2] ask to set the thermostat to a value that is 3 more than the value returned, and then [3] ask what the current setpoint is. You MUST have one screenshot that shows all three questions (and answers) on the left.



5. [20 points] Cut-and-paste the routine that handles the command to set the thermostat temperature (e.g., SetCurrentSetpointIntentHandler) . To receive full credit, this code must interact with your REST service. **ALSO attach all source code for your Alexa routine to your collab submission (e.g., lambda_function.py).**

```
class SetCurrentSetpointIntentHandler(AbstractRequestHandler):

    """Handler for SetCurrentSetpoint Intent."""

    def can_handle(self, handler_input):

        # type: (HandlerInput) -> bool

        return ask_utils.is_intent_name("SetCurrentSetpoint")(handler_input)

    def handle(self, handler_input):

        url = "http://35.172.100.94:5000/ThermsAreUs/api/v1.0/current-
setpoint"

        headers = {'Content-Type': "application/json", 'Accept':
"application/json"}

        slots = handler_input.request_envelope.request.intent.slots

        new_setpoint = slots['setpoint']

        if(new_setpoint.value):

            data={'newsetpt': new_setpoint.value}

            r = requests.put(url, json=data, headers=headers)

            speak_output = "The setpoint has been changed to " +
str(new_setpoint.value) + " degrees!"

        return (

            handler_input.response_builder

                .speak(speak_output)

                # .ask("add a reprompt if you want to keep the session open
for the user to respond")

                .response

        )
```